
AMIGOS DEL
MSX
AÑO II
N.º 6
295 PTS.
• JACK
• SALVAMENTO
• DADOS
• SUBMARINO
• CUESTA
• SUPER ROTO
• SALTO
• MOSQUITO
• CRUZADA



690 Ptas.

SOFTWARE

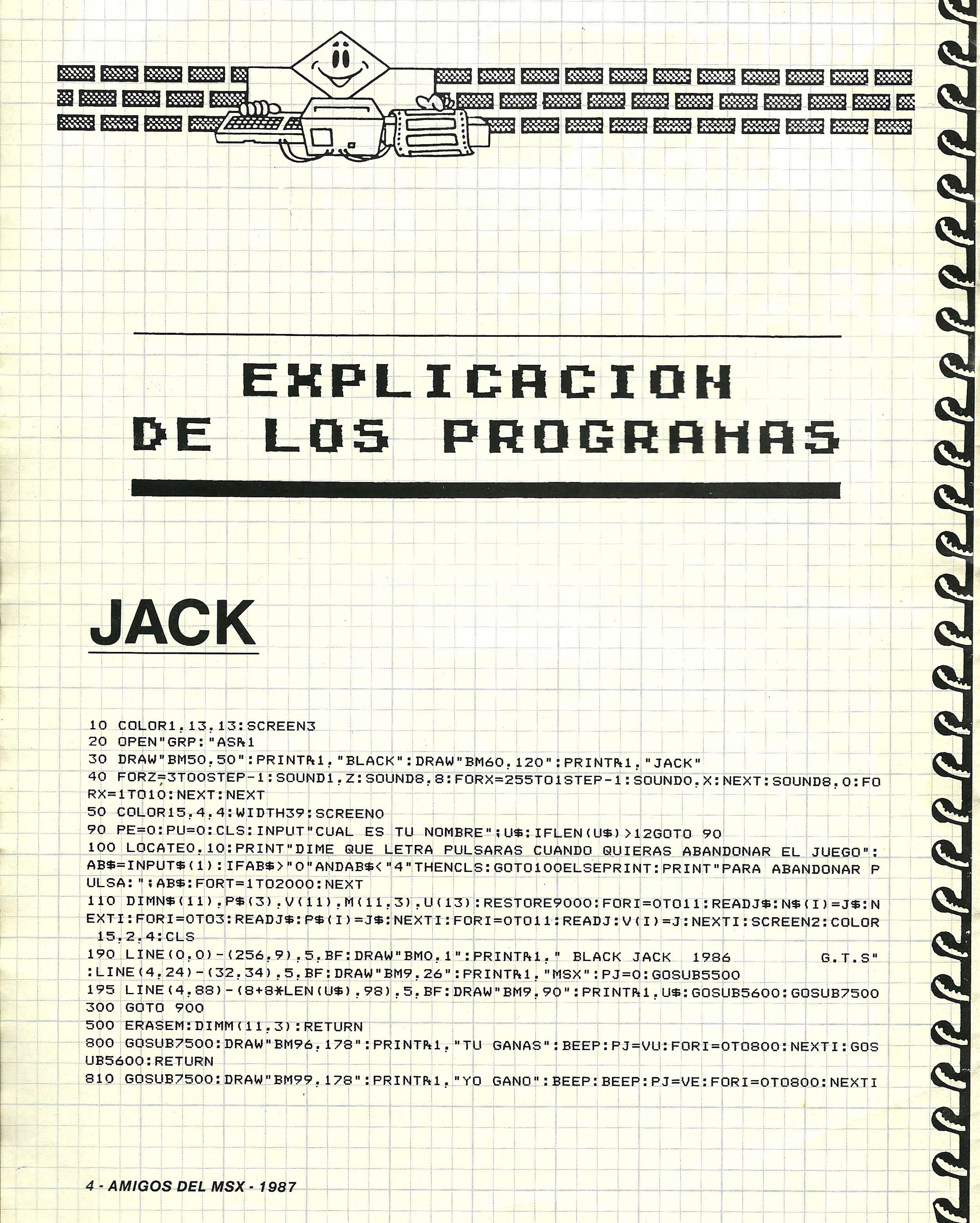
FOLOW THE CLUES

AMIGOS DEL MSX



SUMARIO

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EXPLICACION DE LOS PROGRAMAS

JACK

```
10 COLOR1,13,13:SCREEN3
20 OPEN"GRP:"AS₧1
30 DRAW"BM50,50":PRINT₧1,"BLACK":DRAW"BM60,120":PRINT₧1,"JACK"
40 FORZ=3TOOSTEP-1:SOUND1,Z:SOUND8,8:FORX=255TO1STEP-1:SOUNDO,X:NEXT:SOUND8,O:FO
RX=1TO10:NEXT:NEXT
50 COLOR15,4,4:WIDTH39:SCREENO
90 PE=O:PU=O:CLS:INPUT"CUAL ES TU NOMBRE";U$:IFLEN(U$)>12GOTO 90
100 LOCATEO,10:PRINT"DIME QUE LETRA PULSARAS CUANDO QUIERAS ABANDONAR EL JUEGO":
AB$=INPUT$(1):IFAB$>"O"ANDAB$<"4"THENCLS:GOTO100ELSEPRINT:PRINT"PARA ABANDONAR P
ULSA:";AB$:FORT=1TO2000:NEXT
110 DIMN$(11),P$(3),V(11),M(11,3),U(13):RESTORE9000:FORI=OTO11:READJ$:N$(I)=J$:N
EXTI:FORI=OTO3:READJ$:P$(I)=J$:NEXTI:FORI=OTO11:READJ:V(I)=J:NEXTI:SCREEN2:COLOR
 15,2,4:CLS
190 LINE(O,O)-(256,9),5,BF:DRAW"BMO,1":PRINT₧1," BLACK JACK  1986           G.T.S"
:LINE(4,24)-(32,34),5,BF:DRAW"BM9,26":PRINT₧1,"MSX":PJ=O:GOSUB5500
195 LINE(4,88)-(8+8*LEN(U$),98),5,BF:DRAW"BM9,90":PRINT₧1,U$:GOSUB5600:GOSUB7500
300 GOTO 900
500 ERASEM:DIMM(11,3):RETURN
800 GOSUB7500:DRAW"BM96,178":PRINT₧1,"TU GANAS":BEEP:PJ=VU:FORI=OTO800:NEXTI:GOS
UB5600:RETURN
810 GOSUB7500:DRAW"BM99,178":PRINT₧1,"YO GANO":BEEP:BEEP:PJ=VE:FORI=OTO800:NEXTI
```

```
:GOSUB5500:RETURN
820 GOTO 7500:DRAW"BM52,178":PRINT#1,"NOS PASAMOS LOS DOS":BEEP:FORI=0TO800:NEXT
I:RETURN
900 GOSUB990:GOSUB996:GOSUB1000:GOSUB994:GOSUB2000:GOSUB3502:FORI=0TO1000:NEXTI
910 VE=VA:IF(VU>21)AND(VE>21)THENGOSUB820:GOTO 950
912 IF(VU<=21)AND(VU>=VE)THENGOSUB800:GOTO 950
914 IF(VE<=21)AND(VU<VE)THENGOSUB810:GOTO 950
916 IFVU>21THENGOSUB810:GOTO 950
918 IFVE>21THENGOSUB800:GOTO 950
950 GOSUB990:GOSUB994:VS=0:GOSUB2000:VE=VA:GOSUB996:GOSUB1000:GOSUB3502:FORI=0TO
1000:NEXTI
960 IF(VU>21)AND(VE>21)THENGOSUB820:GOTO 900
962 IF(VU<=21)AND(VU>VE)THENGOSUB800:GOTO 900
964 IF(VE<=21)AND(VU<=VE)THENGOSUB810:GOTO 900
966 IFVU>21THENGOSUB810:GOTO 900
968 IFVE>21THENGOSUB800:GOTO 900
980 GOTO 900
990 GOSUB5000:GOSUB500:NC=1:X=40:GOSUB6100:X=104:GOSUB6100:NC=2:X=40:GOSUB6100:X
=104:GOSUB6100:RETURN
994 GOSUB7500:DRAW"BM96,178":PRINT#1,"MI TURNO":BEEP:FORI=0TO800:NEXTI:RETURN
996 GOSUB7500:DRAW"BM96,178":PRINT#1,"TU TURNO":BEEP:FORI=0TO800:NEXTI:RETURN
1000 ERASEU:DIMU(12):NC=0:GOSUB5100:X=104:GOSUB6200:GOSUB5100:GOSUB6200
1001 Q=1:GOSUB4000:IFVA>21THENGOSUB7000:VU=VA:VA=0:RETURN
1002 GOSUB1500:IFR$="2"GOTO 1100
1010 GOSUB5100:GOSUB6000
1020 GOTO 1001
1100 VU=VA:Q=3:GOSUB4000:RETURN
1500 GOSUB7500:DRAW"BM8,178":PRINT#1,"¡1¿ OTRA CARTA   ¡2¿ ME PLANTO":BEEP
1502 POKE62456!,240:POKE62457!,251:POKE62458!,240:POKE62459!,251:R$=INPUT$(1)
1503 IFR$=AB$THEN10000
1504 IFR$="1"ORR$="2"THENGOSUB7500:RETURN
1506 GOTO 1502
2000 ERASEU:DIMU(12):VS=VA+7:IFVS>20THENVS=17
2010 X=40:NC=0:GOSUB5100:P1=SS:C1=S:GOSUB5100:P2=SS:C2=S:Q=1
2012 GOSUB4000:IFVA>=18GOTO 3600
2014 GOSUB4000:IF(VU>21)AND(VA<=11)THENGOSUB5100:GOSUB4000:GOSUB6000:GOTO 3600
2015 GOSUB4000:IFVU>21GOTO 3600
2016 IFVS=0GOTO 2045
2020 GOSUB4000:IFVA<VSTHENGOSUB3000:IFVA>21GOTO 3500
2030 IFVA<VSGOTO 2020
2040 IFVA>21GOTO 3500
2045 IFVA<=11GOTO 3010
2070 IFVA=12THENIFRND(-TIME)<.98GOTO 3010
2071 IFVA>=18GOTO 3600
2072 IFVA=13THENIFRND(-TIME)<.9GOTO 3010
2074 IFVA=14THENIFRND(-TIME)<.8GOTO 3010
2076 IFVA=15THENIFRND(-TIME)<.6GOTO 3010
2078 IFVA=16THENIFRND(-TIME)<.35GOTO 3010
2080 IFVA=17THENIFRND(-TIME)<.15GOTO 3010
2090 GOTO 3600
3000 GOSUB5100:GOSUB6000:GOSUB4000:RETURN
3010 GOSUB5100:GOSUB6000:GOSUB4000:GOTO 2040
3500 GOSUB7500:DRAW"BM99,178":PRINT#1,"ME PASE":BEEP:FORI=0TO600:NEXTI
3502 X=40:SS=P1:S=C1:NC=1:GOSUB6000:SS=P2:S=C2:NC=2:GOSUB6000:RETURN
3600 GOSUB7500:DRAW"BM91,178":PRINT#1,"ME PLANTO":BEEP:FORI=0TO900:NEXTI:RETURN
4000 VA=0:FORI=QTO12:VA=VA+U(I):NEXTI
4020 IFVA<=21THENRETURN
4040 FORI=QTO12:IFU(I)<>11GOTO4060
4050 VA=VA-10:IFVA<=21THENRETURN
4060 NEXTI:RETURN
5000 LINE(0,40)-(256,72),2,BF:LINE(0,103)-(256,154),2,BF:RETURN
```

```
5100 S=INT(RND(-TIME)*12):SS=INT(RND(-TIME)*4):IFM(S,SS)=1GOTO 5100
5104 NC=NC+1:U(NC)=V(S):M(S,SS)=1:RETURN
5200 IFSS<2THENCO=6ELSECO=1
5202 RETURN
5500 PE=PE+PJ:W=8*LEN(STR$(PE)):LINE(120,24)-(120+W,34),5,BF:DRAW"BM120,26":PRIN
T#1,PE:BEEP:RETURN
5600 PU=PU+PJ:W=8*LEN(STR$(PU)):LINE(120,88)-(120+W,98),5,BF:DRAW"BM120,90":PRIN
T#1,PU:BEEP:RETURN
6000 LINE(-16+24*NC,X)-(8+24*NC,X+32),15,BF:H=-16+24*NC:K=X
6010 GOSUB5200:COLORCO:KK=K+1:HH=H+4:DRAW"BM=HH;,=KK;":PRINT#1,N$(S):KK=KK+10:DR
AW"BM=HH;,=KK;":PRINT#1,P$(SS):BEEP:COLOR15:RETURN
6100 LINE(-16+24*NC,X)-(8+24*NC,X+32),15,BF:COLOR6:FORI=0TO3:H=-16+24*NC:K=X+8*I
:DRAW"BM=H;,=K;":PRINT#1,"LLL":NEXTI:BEEP:COLOR15:RETURN
6200 GOSUB6100:LINE(H,X)-(H+15,X+19),15,BF:K=X+1:GOSUB6010:RETURN
7000 GOSUB7500:DRAW"BM48,178":PRINT#1,"LO SIENTO TE PASASTE":BEEP:FORI=0TO850:NE
XTI:RETURN
7500 LINE(0,170)-(256,196),5,BF:BEEP:RETURN
9000 DATA"A","2","3","4","5","6","7","8","9","J","Q","K"," C"," D"," F"," E"
9002 DATA11,2,3,4,5,6,7,8,9,10,10,10
10000 COLOR15,4,4:SCREEN0:LOCATE4,10:PRINT"PARA OTRA PARTIDA PULSA P":LOCATE4,12
:PRINT"PARA OTRO PROGRAMA PULSA F":R$=INPUT$(1):IFR$="P"ORR$="p"THENRUNELSEIFR$<
>"F"ANDR$<>"f"THEN10000
10010 CLEAR:CLS:LOCATE4,8:PRINT"PARA EL SIGUIENTE PROGRAMA":LOCATE4,10:PRINT"PUL
SA PLAY EN EL CASSETTE"
10020 CLOAD
```



DADOS

```
10 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20 ' 0 0 0 0             0 0 0 0
30 ' 0 0 0 0   DADOS     0 0 0 0
40 ' 0 0 0 0             0 0 0 0
50 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60 '
70 COLOR 3,6,10
80 SCREEN 3
90 OPEN"GRP:"AS₧1
100 PSET(45,80),6:PRINT₧1,"DADOS"
110 FOR Y=1 TO 1500:NEXT
120 CLOSE
130 KEY OFF:SCREEN 0:WIDTH 39:COLOR 1,15,4
140 RESTORE 1170:LOCATE0,22:FOR I=1 TO 13:READ X$:LOCATE 0,I*2:BEEP:PRINTX$:NEXT
 I
150 X$=INKEY$:IF X$="" THEN 150 ELSE CLS
160 CLS:INPUT"Cual es tu nombre";N$:IF LEN(N$)>10 THEN CLS:GOTO 160
170 OPEN"grp:"AS₧1:SCREEN2:DRAW"bm8,16":PRINT₧1,N$;": 0":DRAW"bm170,15":PRINT₧1,
"MSX: 0":GOTO 220
180 DRAW "BM 64,178":PRINT₧1,"O:OTRA      F:FIN"
190 X$=INKEY$:IF X$="" THEN 190 ELSE IF X$="O" OR X$="o" THEN 200 ELSE IF X$="F"
 OR X$="f" THEN 1110 ELSE 190
200 SU=0:IF IN=1 THEN IN=0:GOTO 370
210 IF IN=0 THEN IN=1:LINE(56,26)-(200,192),15,BF:LINE(136,0)-(162,9),15,BF:GOTO
 300
220 RESTORE 1160:SU=0:FOR I=1 TO 6:READX$:C$(I)=X$:NEXT I:X=RND(-TIME):IF X<.5 T
HEN 300 ELSE 370:IN=0
230 IF SU<21 THEN RETURN
240 IF SU=21 THEN DRAW"bm88,168":PRINT₧1,"HAS GANADO":GU=GU+1:GOSUB 1120:GOTO 18
0
250 IF SU>21 THEN DRAW"BM88,168":PRINT₧1,"HAS PERDIDO":GM=GM+1:GOSUB 1140:GOTO 1
80
260 DRAW "BM64,158":PRINT₧1,"ELIJO LA CARA:";CE:BEEP
270 IF SU<21 THEN RETURN
280 IF SU=21 THEN DRAW"bm88,168":PRINT₧1,"HE  GANADO":GM=GM+1:GOSUB 1140:GOTO 18
0
290 IF SU>21 THEN DRAW"BM88,168":PRINT₧1,"HAS GANADO":GU=GU+1:GOSUB 1120:GOTO 18
0
300 IN=1:DRAW"bm 64,168":PRINT₧1,"Que cara escoges":DRAW"bm 88,178":PRINT₧1,"1 2
 3 4 5 6":BEEP
```

```
310 X$=INKEY$:IF X$="" THEN 310 ELSE IF X$<"1" OR X$>"6" THEN 310 ELSE 360
320 DRAW"bm 64,168":PRINT#1,"Que cara escoges":BEEP:DRAW"bm 88,178":FOR I=1 TO 4:PRINT#1,MID$(C$(CS),I,1);"  ";:NEXT I:BEEP
330 X$=INKEY$:IF X$="" THEN 330
340 FOR I=1 TO 4:IF MID$(C$(CS),I,1)=X$ THEN 360
350 NEXT I:GOTO 330
360 CE=VAL(X$):CS=CE:GOSUB 420:GOSUB 230:FOR I=0 TO 800:NEXT I:GOTO 370
370 IF SU>0 THEN 400
380 X=RND(-TIME):IF X<.5 THEN CE=3 ELSE CE=4
390 GOTO 410
400 ON SU GOSUB 880,870,850,830,810,790,770,750,730,710,690,670,650,630,610,590,570,550,530,510
410 CS=CE:GOSUB 420:GOSUB 260:GOTO 320
420 LINE(56,26)-(200,192),15,BF:BEEP:LINE(136,0)-(162,9),15,BF:BEEP
430 SU=SU+CE:DRAW"bm96,1":PRINT#1,"Suma=";SU:BEEP:GOSUB1100:GOSUB 440:RETURN
440 IF CE=1 THEN Z=0:GOSUB910:Z=64:GOSUB940:GOSUB970:GOSUB980:GOSUB1020:GOSUB1070
450 IF CE=2 THEN Z=0:GOSUB930:Z=64:GOSUB890:GOSUB960:GOSUB990:GOSUB1020:GOSUB1070
460 IF CE=3 THEN Z=0:GOSUB900:Z=64:GOSUB920:GOSUB970:GOSUB980:GOSUB1040:GOSUB1050
470 IF CE=4 THEN Z=0:GOSUB920:Z=64:GOSUB900:GOSUB970:GOSUB980:GOSUB1010:GOSUB1080
480 IF CE=5 THEN Z=0:GOSUB890:Z=64:GOSUB930:GOSUB950:GOSUB1000:GOSUB1020:GOSUB1070
490 IF CE=6 THEN Z=0:GOSUB940:Z=64:GOSUB910:GOSUB970:GOSUB980:GOSUB1030:GOSUB1060
500 RETURN
510 IF CS=1 OR CS=6 THEN CE=2 ELSE CE=1
520 RETURN
530 IF CS=2 OR CS=5 THEN CE=1 ELSE CE=2
540 RETURN
550 IF CS=3 OR CS=4 THEN CE=1 ELSE CE=3
560 RETURN
570 IF CS=3 OR CS=4 THEN CE=2 ELSE CE=4
580 RETURN
590 IF CS=2 OR CS=5 THEN CE=1 ELSE CE=5
600 RETURN
610 IF CS=1 OR CS=6 THEN CE=3 ELSE CE=6
620 RETURN
630 IF CS=2 OR CS=5 THEN CE=3 ELSE CE=2
640 RETURN
650 IF CS=3 OR CS=4 THEN CE=1 ELSE CE=4
660 RETURN
670 IF CS=1 OR CS=6 THEN CE=2 ELSE CE=1
680 RETURN
690 IF CS=2 OR CS=5 THEN CE=1 ELSE CE=5
700 RETURN
710 IF CS=2 OR CS=5 THEN CE=3 ELSE CE=2
720 RETURN
730 IF CS=3 OR CS=4 THEN CE=1 ELSE CE=3
740 RETURN
750 IF CS=3 OR CS=4 THEN CE=1 ELSE CE=4
760 RETURN
770 IF CS=2 OR CS=5 THEN CE=1 ELSE CE=5
780 RETURN
790 IF CS=1 OR CS=6 THEN CE=3 ELSE CE=6
800 RETURN
810 IF CS=2 OR CS=5 THEN CE=3 ELSE CE=2
820 RETURN
```

```
830 IF CS=1 OR CS=2 THEN CE=4 ELSE CE=1
840 RETURN
850 IF CS=1  THEN CE=2 ELSE CE=1
860 RETURN
870 CE=1:RETURN
880 CE=2:RETURN
890 X=135:Y=63+Z:GOSUB 1090:X=119:Y=79+Z:GOSUB 1090
900 X=119:Y=63+Z:GOSUB 1090:X=135:Y=79+Z:GOSUB 1090
910 X=127:Y=71+Z:GOSUB 1090:RETURN
920 X=135:Y=63+Z:GOSUB 1090:X=119:Y=79+Z:GOSUB 1090
930 X=119:Y=62+Z:GOSUB 1090:X=135:Y=79+Z:GOSUB1090:RETURN
940 X=135:Y=63+Z:GOSUB 1090:X=119:Y=79+Z:GOSUB 1090:X=119:Y=63+Z:GOSUB 1090:X=13
5:Y=79+Z:GOSUB 1090:X=127:Y=63+Z:GOSUB 1090:Y=79+Z:GOSUB 1090:RETURN
950 X=127:Y=43:GOSUB 1090:RETURN
960 X=127:Y=39:GOSUB 1090:X=151:GOSUB 1090:X=111:Y=47:GOSUB 1090:X=127:GOSUB 109
0
970 X=103:Y=39:GOSUB 1090:X=143:Y=47:GOSUB 1090:RETURN
980 X=111:Y=95:GOSUB 1090:X=143:GOSUB 1090:X=103:Y=103:GOSUB 1090:X=151:GOSUB 10
90
990 X=127:Y=99:GOSUB 1090:RETURN
1000 X=111:Y=95:GOSUB 1090:X=143:GOSUB 1090:X=103:Y=103:GOSUB 1090:X=151:GOSUB 1
090:X=127:Y=95:GOSUB 1090:Y=103:GOSUB 1090:RETURN
1010 X=151:Y=71:GOSUB 1090:X=159:GOSUB 1090:
1020 X=151:Y=55:GOSUB 1090:Y=87:GOSUB 1090:X=159:Y=47:GOSUB 1090:Y=95:GOSUB 1090
:RETURN
1030 X=151:Y=55:GOSUB 1090:X=159:Y=95:GOSUB 1090
1040 X=156:Y=72:GOSUB 1090:RETURN
1050 X=95:Y=71:GOSUB 1090:X=103:GOSUB 1090
1060 X=95:Y=47:GOSUB 1090:Y=95:GOSUB 1090:X=103:Y=55:GOSUB 1090:Y=87:GOSUB 1090:
RETURN
1070 X=95:Y=47:GOSUB 1090:X=103:Y=87:GOSUB 1090
1080 X=99:Y=70:GOSUB 1090:RETURN
1090 DRAW "bm=x;,=y; r2d1l2u2r2":RETURN
1100 PLAY"O3L3CO5L16BL8D":DRAW"bm 87,31 r81 d81 l81 u81":DRAW"bm112,56 c7 r31 d3
1 l31 u31":DRAW"bm 87,31 c1 f25 bf31 f25 bu81 g25 bg31 g25":DRAW"bm 112,120 r31
d31 l31 u31":PAINT (114,58),7:COLOR 1:RETURN
1110 CLEAR:COLOR15,4,4:SCREEN 0:LOCATE 3,10:PRINT"PULSA PLAY PARA PROXIMO PROGRA
MA":CLOAD
1120 PLAY"t255O4L16FFFO5DO4B-B-B-O5CO4AAAL8B-GR16O5L16CCO4B-L8B-AL16AB-B-AL8GF":
LINE(0,14)-(136,25),15,BF:DRAW"BM8,16":PRINT#1,N$;":";GU
1130 IF PLAY(1)=-1 THEN 1130 ELSE RETURN
1140 PLAY"o4L8AO5L2DL4DC+O4L2AL4AR8L8AO5L2DL4DL8EC+L2DL4DR8L8CO4L2B-L8B-O5CDO4B-
L2AL4A":LINE(138,14)-(256,25),15,BF:DRAW"BM170,15":PRINT#1,"MSX:";GM
1150 IF PLAY(1)=-1 THEN 1150 ELSE RETURN
1160 DATA"2345","1346","1256","1256","1346","2345"
1170 DATA"                DADO 21"," El objetivo del presente juego es ni","m s ni
 menos que obtener 21 puntos, (y","como se obtinen los puntos?, muy facil,","sum
ando el valor de la cara superior"
1180 DATA"del dado que aparece en rara perspec-","tiva. Por turno se ha de ir vo
lteando","el dado, el que alcanze los 21 puntos","gana, el que se pase pierde.",
,,,"       PULSA TECLA PARA COMENZAR"
```



CUESTA

```
10 ' O O O O O O O O O O O O O O O O O O O O O O O
20 ' O O O O                    O O O O
30 ' O O O O   CUESTA    O O O O
40 ' O O O O                    O O O O
50 ' O O O O O O O O O O O O O O O O O O O O O O O
60 '
70 'LUIS SANGUINO ARIAS
80 '
90 '           1986
100 ' O O O O O O O O O O O O O O O O O O O O O O O
110 '
120 COLOR 1,3,10
130 SCREEN 3
140 OPEN"GRP:"AS#1
150 PSET(40,80),3:PRINT#1,"CUESTA"
160 FOR Y=1 TO 1500:NEXT
170 CLOSE
180 COLOR 1,14
190 SCREEN 1
200 LOCATE 3,10:PRINT"JOTSTICK O CURSOR¨J/C}"
210 X$=INKEY$
220 I=I+1:IFI>13 THEN I=1
230 VDP(7)=I
240 IF X$="J"OR X$="j" THEN CT=1:GOTO270
250 IF X$="c"OR X$="C" THEN CT=0:GOTO270
260 GOTO 210
270 COLOR 1,15,8:SCREEN 2,2,1
280 OPEN"GRP:"AS#1
290 DRAW"C3BM0,180R29U21E25R19E4U20E12R37E18R15E6U20R16E20U1R16E5U15R11E16U1D1
300 PAINT (1,191),3
310 FOR K=1 TO 7 :B$="":FORI=1TO 32 :READ A$:B$=B$+CHR$(VAL("&H"+A$)):NEXT:SPRIT
E$ (K)=B$:NEXT
320 VI=5
330 GOSUB 750
340 X=5:Y=164
350 A=1:B=2:PX=240:PY=-4:E=6:G=7
```

```
360 ON SPRITE GOSUB 590
370 PX=PX-4:PY=PY+4
380 IF POINT(PX+8,PY+26)<>3 THEN PY=PY+3
390 IF POINT(PX+8,PY+18)=3 THEN PY=PY-3:PX=PX-3
400 IF PX<=0 THEN PY=-4:PX=240
410 IF F=0 THEN PUTSPRITE 1,(X,Y),1,A
420 IF F=1 THEN PUTSPRITE 1,(X,Y), 1, C
430 IF F=2 THEN PUTSPRITE 1,(X,Y), 1, 5
440 PUTSPRITE 2,(PX,PY), 6, E
450 GOSUB 490
460 IF MM=0 THEN SPRITE ON
470 SWAP E,G
480 GOTO 370
490 IF MM=0 THEN S=STICK(CT)
500 IF S=3 THEN X=X+2:Y=Y-2:SWAP A,B:F=0
510 IF S=7 THEN X=X-2:Y=Y+2:SWAP C,D:F=1
520 IF S=5 THEN F=2
530 IF POINT(X+12,Y+16)<>3 THEN Y=Y+2
540 IF POINT(X+12,Y+14)=3 THEN Y=Y-2
550 IF Y<=-8 THEN 630
560 IF X<=0 AND MM=1 THEN MM=0 :GOSUB 750
570 IF X<=0 THEN X=0
580 RETURN
590 SPRITE OFF
600 VI=VI-1
610 MM=1:S=7:D=3:C=5:PY=209
620 RETURN
630 PU=PU+100:BEEP:BEEP:BEEP
640 LINE (70,180)-(180,192),15,BF
650 PSET(76,182),15:PRINT#1,"PUNTOS=";PU
660 GOTO 340
670 SCREEN 1:KEYOFF
680 LOCATE 8,10:PRINT"HAS MUERTO"
690 LOCATE 3,15:PRINT"TUS PUNTOS HAN SIDO=";PU
700 LOCATE 1,20:PRINT"OTRA PARTIDA SI O NO ¡S/N¿"
710 X$=INKEY$
720 IF X$="S"OR X$="s"THEN CLEAR:GOTO 270
730 IF X$="n"OR X$="N"THEN SCREEN 0:END
740 GOTO 710
750 LINE(80,0)-(155,10),13,BF
760 PSET(86,2),3:PRINT#1,"VIDAS=";VI
770 IF VI=0 THEN 670
780 C=3:D=4:F=2
790 IF BB=0 THEN BB=1:F=0
800 RETURN
810 DATA 1,3,3,1,0,1,1,1,3,5,1,2,4,38,20,0,80,C0,E0,C0,80,80,80,F0,80,80,80,40,2
0,10,10,18
820 DATA 1,3,3,1,0,1,1,1,1,3,5,1,1,1,1,1,80,C0,E0,C0,80,80,80,80,C0,A0,90,40,40,
40,40,80
830 DATA 1,3,7,3,1,1,1,F,1,1,1,2,4,8,8,18,80,C0,C0,80,0,80,80,80,C0,A0,80,40,20,
1C,4,0
840 DATA 1,3,7,3,1,1,1,1,3,5,9,2,2,2,2,1,80,C0,C0,80,0,80,80,80,80,C0,A0,80,80,8
0,80,80
850 DATA0,0,0,0,0,0,0,0,0,0,0,E3,9F,7,E8,90,0,0,0,0,0,0,0,0,0,C,CE,FF,CE,44,30
860 DATA0,1,7,F,F,1B,37,37,6F,6F,37,1B,F,F,1,0,0,80,80,C0,C0,E0,F0,70,B8,D8,F8,F
0,F0,E0,80,0
870 DATA 0,1,F,F,1B,37,6F,6F,37,37,1B,F,F,7,1,0,0,80,E0,F0,F0,F8,D8,B8,70,F0,E0,
C0,C0,80,80,0,0
```

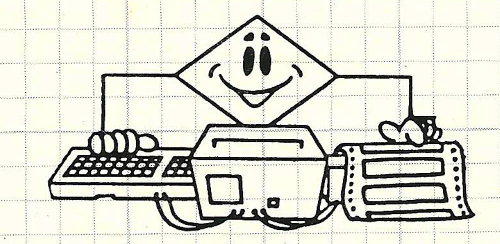


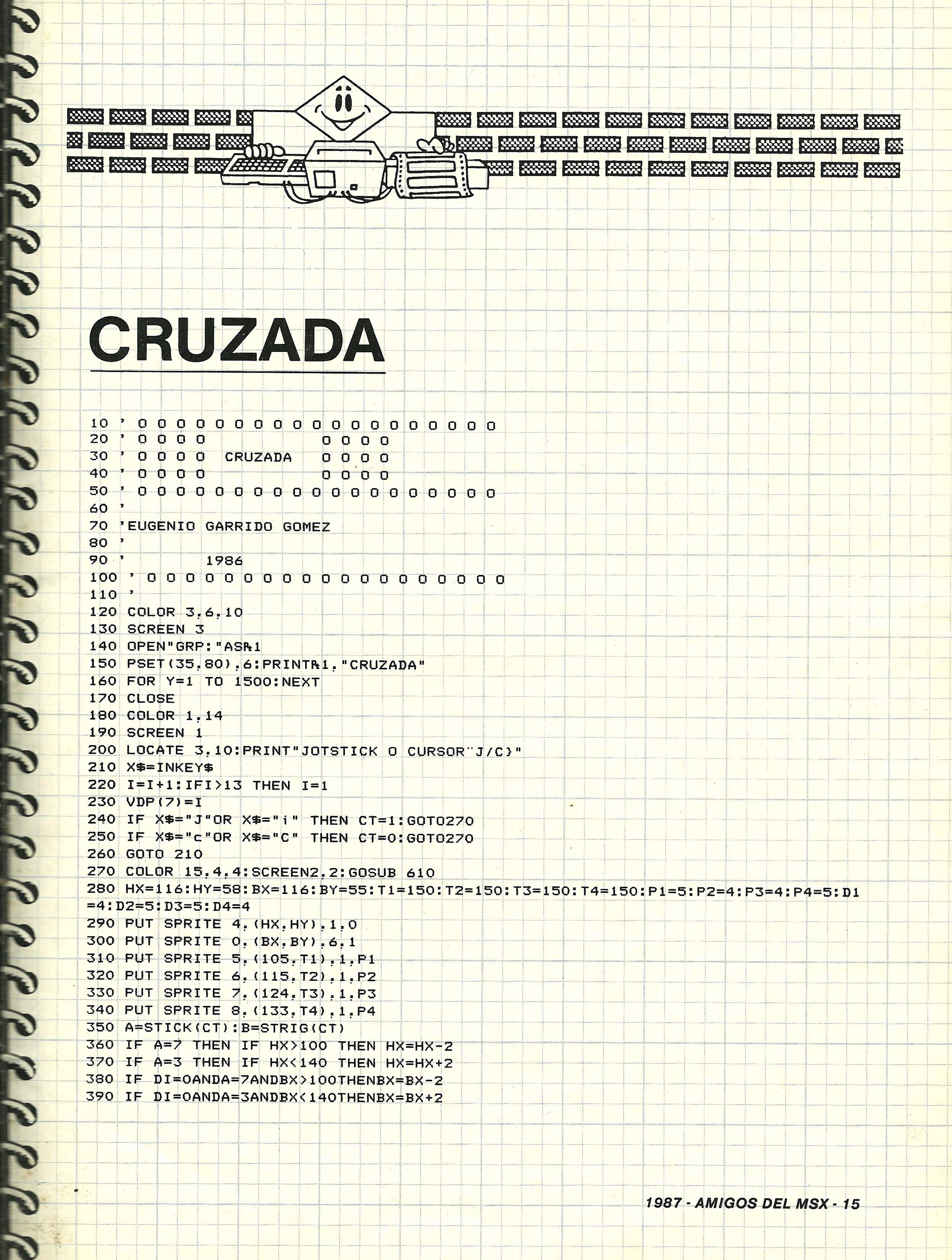
MOSQUITO

```
10 ' O O O O O O O O O O O O O O O O O O O O O
20 ' O O O O                 O O O O
30 ' O O O O MOSQUITO        O O O O
40 ' O O O O                 O O O O
50 ' O O O O O O O O O O O O O O O O O O O O O
60 '
70 COLOR 1,11,3
80 SCREEN 3
90 OPEN"GRP:"AS#1
100 PSET(5,80),6:PRINT#1,"MOSQUITO"
110 FOR Y=1 TO 1500:NEXT
120 CLOSE
130 SCREEN0:WIDTH39:KEYOFF:SCREEN0,,0:OPEN"GRP:"AS#1
135 COLOR 15,1,1
140 ZN=1:MS=5
150 RESTORE970:FORZ=1TO20:READE$:LOCATE0,Z:PRINTE$:BEEP:NEXT
160 IFINKEY$=""THEN160ELSECLS
170 CLS:LOCATE3,12:PRINT"ELECCION DE LAS TECLAS DE JUEGO:":LOCATE5,18:PRINT"(PAR
A SUBIR?"
180 L$=INKEY$:IFL$=""ORL$<CHR$(33)ANDL$<>CHR$(30)THEN180ELSEIFL$=CHR$(30)THENS$=
L$:L$="CURSOR ARRIBA"ELSES$=L$
190 LOCATE1,1:PRINT"SUBIR: ";L$
200 LOCATE5,18:PRINT"(PARA BAJAR?"
210 L$=INKEY$:IFL$=""ORL$<CHR$(33)ANDL$<>CHR$(31)THEN210ELSEIFL$=CHR$(31)THENB$=
L$:L$="CURSOR ABAJO"ELSEB$=L$
220 LOCATE1,3:PRINT"BAJAR: ";L$
230 LOCATE5,18:PRINT"(PARA IR A LA DERECHA?"
240 L$=INKEY$:IFL$=""ORL$<CHR$(33)ANDL$<>CHR$(28)THEN240ELSEIFL$=CHR$(28)THEND$=
L$:L$="CURSOR A LA DERECHA"ELSED$=L$
250 LOCATE1,5:PRINT"DERECHA: ";L$
260 LOCATE5,18:PRINT"(PARA IR A LA IZQUIERDA?"
270 L$=INKEY$:IFL$=""ORL$<CHR$(33)ANDL$<>CHR$(29)THEN270ELSEIFL$=CHR$(29)THENI$=
L$:L$="CURSOR A LA IZQUIERDA"ELSEI$=L$
280 LOCATE1,7:PRINT"IZQUIERDA: ";L$
290 LOCATE5,18:PRINTSTRING$(30,32):LOCATE5,18:PRINT"ESTAS CONFORME (S/N)"
300 L$=INKEY$:IFL$="N"ORL$="n"THENCLS:GOTO170ELSEIFL$<>"S"ANDL$<>"s"THEN300
310 SCREEN2,0:GOSUB1000:GOSUB1020
320 LINE(0,0)-(255,191),5,B:LINE(0,0)-(255,20),5,BF:COLOR15:GOSUB920:GOSUB940:GO
SUB950:GOSUB960
330 K=RND(-TIME):FORZ=1TOTM
340 XS(Z)=INT(RND(1)*33):XS(Z)=XS(Z)*8:YS(Z)=INT(RND(1)*23+2):YS(Z)=YS(Z)*8
```

```
350 K=POINT(XS(Z)+4,YS(Z)+4):IFK<>1THEN340
360 DRAW"BM=XS(Z);,=YS(Z);C4R7D6L5U4L2U2":PAINT(XS(Z)+4,YS(Z)+4),4:NEXT
370 FORZ=1TO10
380 XM(Z)=INT(RND(1)*33):XM(Z)=XM(Z)*8:YM(Z)=INT(RND(1)*20+4):YM(Z)=YM(Z)*8-3
390 K=POINT(XM(Z)+3,YM(Z)):IFK<>1THEN380
400 X=XM(Z):Y=YM(Z):DRAW"BM=X;,=Y;C6D1F3E3U1H3D2H1G2":PAINT(X+3,Y+2),6:NEXT
410 XV=INT(RND(1)*33):XV=XV*8:YV=INT(RND(1)*21+3):YV=YV*8+1
420 K=POINT(XV+4,YV+4):IFK<>1THEN410
430 LINE(XV,YV)-(XV+7,YV+7),2,BF
440 XA=INT(RND(1)*33):XA=XA*8:YA=INT(RND(1)*23+2):YA=YA*8
450 K=POINT(XA+4,YA+4):IFK<>1THEN440
460 PUTSPRITE0,(XA,YA),8,0
470 XM=INT(RND(1)*33):XM=XM*8:YM=INT(RND(1)*23+2):YM=YM*8
480 K=POINT(XM+4,YM+4):IFK<>1THEN470
490 DR$="D":GOSUB640
500 ONSPRITEGOSUB820:SPRITEON
510 J=0:L$=INKEY$
520 IFL$=S$THENGOSUB600:J=1
530 IFL$=B$THENGOSUB620:J=1
540 IFL$=D$THENGOSUB640:J=1
550 IFL$=I$THENGOSUB670:J=1
560 IFJ=1THEN730
570 SOUND0,220:SOUND1,3:SOUND2,255:SOUND3,5:SOUND8,5:IFJ=1THENFORT=1TO10:NEXT:SO
UND8,6
580 K=RND(-TIME)+.1:IFK<ZN/10THEN790
590 GOTO510
600 IFYM>28THENYM=YM-8:GOSUB700
610 RETURN
620 IFYM<177THENYM=YM+8:GOSUB700
630 RETURN
640 IFXM<247THENXM=XM+8
650 IFDR$="I"THENKP=2:GOSUB720
660 DR$="D":GOSUB700:RETURN
670 IFXM>7THENXM=XM-8:DR$="I":GOSUB700
680 IFDR$="I"THENKP=1:GOSUB720
690 DR$="I":GOSUB700:RETURN
700 IFDR$="I"THENSP=2ELSESP=1
710 PUTSPRITESP,(XM,YM),10,SP:RETURN
720 PUTSPRITEKP,(-8,191),,KP:RETURN
730 TC=POINT(XM+4,YM+4)
740 IFTC=6THENLINE(XM,YM)-(XM+7,YM+9),1,BF:BEEP:E=E+100:GOSUB920:MN=MN-1
750 IFTC=4THEN830
760 IFTC=15THEN910
770 E=E-10:GOSUB920:IFE<=0THEN830
780 GOTO570
790 IFXM<XATHENXA=XA-4ELSEIFXM>XATHENXA=XA+4
800 IFYM<YATHENYA=YA-4ELSEIFYM>YATHENYA=YA+4
810 PUTSPRITE0,(XA,YA),,0:GOTO510
820 RETURN830
830 SPRITEOFF:FORZ=1TO3:SOUND1,1:SOUND8,5:FORT=0TO255:SOUND0,T:NEXT:NEXT:SOUND8,
0
840 MS=MS-1:GOSUB960:IFMS<1THEN860
850 LINE(0,20)-(255,191),1,BF:DRAW"BM50,120":PRINT#1,"CONTINUAMOS (S/N)":L$=INPU
T$(1):IFL$="N"ORL$="n"THEN870ELSEIFL$="S"ORL$="s"THENGOSUB1020:GOTO310ELSE850
860 LINE(0,0)-(255,191),1,BF:DRAW"BM10,120":PRINT#1,"HAN MUERTO TODOS TUS MOSQUI
TOS":FORT=1TO15:FORS=100TO1STEP-1:SOUND0,S:SOUND1,T:SOUND8,4:NEXT:NEXT
870 COLOR15,4,4:SCREEN0:LOCATE3,10:PRINT"PARA OTRA PARTIDA PULSA LA TECLA P":LOC
ATE3,12:PRINT"PARA OTRO PROGRAMA PULSA LA TECLA F":SOUND8,0
880 R$=INKEY$:IFR$=""THEN880ELSEIFR$="P"ORR$="p"THENRUNELSEIFR$<>"F"ANDR$<>"f"TH
EN880
```

```
890 CLOSE#1:CLEAR:COLOR15,4,4:SCREEN0,,1:LOCATE4,10:PRINT"PARA EL SIGUIENTE PROG
RAMA":LOCATE4,12:PRINT"PULSA PLAY EN EL CASSETTE"
900 CLOAD
910 FORZ=1TOTM:LINE(XS(Z),YS(Z))-(XS(Z)+7,YS(Z)+7),1,BF:PT=PT+10:PLAY"T255L64N=Z
;":GOSUB940:FORT=1TO25:NEXTT,Z:ZN=ZN+1:GOSUB1020:GOTO310
920 LINE(90,0)-(125,10),5,BF:DRAW"BM10,1":PRINT#1,USING"ENERGIA: ####";E:IFMN=OT
HENLINE(XV,YV)-(XV+7,YV+7),15,BF
930 RETURN
940 LINE(202,0)-(255,10),5,BF:DRAW"BM130,1":PRINT#1,USING"PUNTOS:  #####";PT:RET
URN
950 LINE(218,11)-(242,20),5,BF:DRAW"BM130,11":PRINT#1,USING"HABITACION:###";ZN:R
ETURN
960 LINE(105,11)-(126,20),5,BF:DRAW"BM10,11":PRINT#1,USING"MOSQUITOS:  #";MS:RET
URN
970 DATA"              M O S Q U I T O",,"En MOSQUITO tendr s que sobrevivir en","un
a habitaci"n, que es un ambiente muy",hostil para los de tu especie...,"  Para te
ner energ!a comer s de los","frutos que hay en la habitaci"n, pero"
980 DATAcon ciudado de no tropezar con los,insecticidas ni con el aracnido que,t
ratar n de eliminarte...,"  Por fin podr s salir por la ventana",cuando te hayas
comido todos los frutos,de la habitaci"n...,"  El movimiento del mosquito se real
iza"
990 DATAcon las teclas que tu eliias...," PULSA CUALQUIER TECLA PARA CONTINUAR"
1000 DATA99,50,30,30,47,255,42,21,198,76,120,120,244,255,84,168,24,60,102,255,18
9,165,165,165
1010 RESTORE1000:FORSP=2TO0STEP-1:T$="":FORX=0TO7:READE:T$=T$+CHR$(E):NEXT:SPRIT
E$(SP)=T$:NEXT:RETURN
1020 E=500:MN=10:TM=10+ZN*5:XS(1)=0:YS(1)=0:ERASEXS,YS:DIMXS(TM),YS(TM):RETURN
```

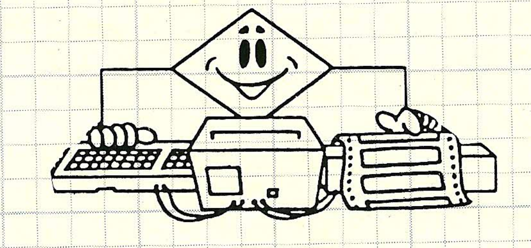


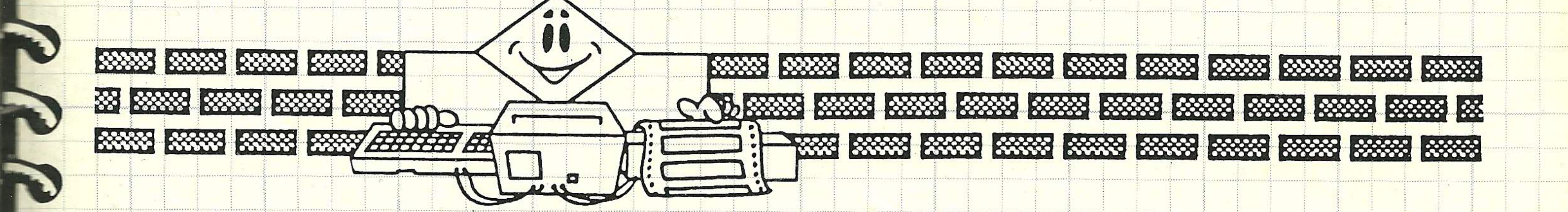


CRUZADA

```
10 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20 ' 0 0 0 0                   0 0 0 0
30 ' 0 0 0 0  CRUZADA     0 0 0 0
40 ' 0 0 0 0                   0 0 0 0
50 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60 '
70 'EUGENIO GARRIDO GOMEZ
80 '
90 '        1986
100 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
110 '
120 COLOR 3,6,10
130 SCREEN 3
140 OPEN"GRP:"AS#1
150 PSET(35,80),6:PRINT#1,"CRUZADA"
160 FOR Y=1 TO 1500:NEXT
170 CLOSE
180 COLOR 1,14
190 SCREEN 1
200 LOCATE 3,10:PRINT"JOTSTICK O CURSOR¨J/C}"
210 X$=INKEY$
220 I=I+1:IFI>13 THEN I=1
230 VDP(7)=I
240 IF X$="J"OR X$="j" THEN CT=1:GOTO270
250 IF X$="c"OR X$="C" THEN CT=0:GOTO270
260 GOTO 210
270 COLOR 15,4,4:SCREEN2,2:GOSUB 610
280 HX=116:HY=58:BX=116:BY=55:T1=150:T2=150:T3=150:T4=150:P1=5:P2=4:P3=4:P4=5:D1
=4:D2=5:D3=5:D4=4
290 PUT SPRITE 4,(HX,HY),1,0
300 PUT SPRITE 0,(BX,BY),6,1
310 PUT SPRITE 5,(105,T1),1,P1
320 PUT SPRITE 6,(115,T2),1,P2
330 PUT SPRITE 7,(124,T3),1,P3
340 PUT SPRITE 8,(133,T4),1,P4
350 A=STICK(CT):B=STRIG(CT)
360 IF A=7 THEN IF HX>100 THEN HX=HX-2
370 IF A=3 THEN IF HX<140 THEN HX=HX+2
380 IF DI=0ANDA=7ANDBX>100THENBX=BX-2
390 IF DI=0ANDA=3ANDBX<140THENBX=BX+2
```

```
400 IF B=-1 AND DI=0THEN DI=1
410 IF DI=1 THEN BY=BY+5
420 IF BY>150 THEN BY=55:BX=HX:DI=0
430 K=INT(RND(1)*6)
440 IF K=0THEN T1=T1-2:SWAP P1,D1
450 IF K=1THEN T2=T2-2:SWAP P2,D2
460 IF K=2THEN T3=T3-2:SWAP P3,D3
470 IF K=3THEN T4=T4-2:SWAP P4,D4
480 IF T1<79ORT2<79ORT3<79ORT4<79THEN:GOTO 600
490 IF BX>104 ANDBX<112 AND BY>T1AND BY<T1+4THENFG=1:GOTO 540
500 IF BX>115 ANDBX<123 AND BY>T2AND BY<T2+5THENFG=2:GOTO 540
510 IF BX>124ANDBX<132 AND BY>T3AND BY<T3+5THENFG=3:GOTO 540
520 IF BX>133ANDBX<141 AND BY>T4AND BY<T4+5THENFG=4:GOTO 540
530 GOTO 290
540 IFFG=1 THEN FORN=T1TO 150 :T1=N:PUT SPRITE 5,(105,N),1,P1:SWAP P1,D1:NEXT N:
GOTO 590
550 IFFG=2 THEN FORN=T2TO 150 :T2=N:PUT SPRITE 6,(115,T2),1,P2:SWAP P2,D2:NEXT N
:GOTO 590
560 IFFG=3 THEN FORN=T3TO 150 :T3=N:PUT SPRITE 7,(124,T3),1,P3:SWAP P3,D3:NEXT N
:GOTO590
570 IFFG=4 THEN FORN=T4TO 150 :T4=N:PUT SPRITE 8,(133,T4),1,P4:SWAP P4,D4:NEXT N
:GOTO590
580 GOTO 290
590 DI=0:BX=HX:BY=55:GOTO 290
600 OPEN"GRP:"AS₧1:PSET (0,30):PRINT₧1,"TU CASTILLO HA SIDO INVADIDO":FOR N=1 TO
 5000:NEXT N:RUN
610 FOR K=0 TO 5 :B$="":FORI=1TO 32 :READ A$:B$=B$+CHR$(VAL("&H"+A$)):NEXT:SPRIT
E$ (K)=B$:NEXT
620 LINE(0,150)-(255,190),9,BF
630 LINE(104,77)-(143,160),10,BF
640 PUTSPRITE 1,(100,70),10, 2
650 PUTSPRITE 2,(116,70),10, 3
660 PUTSPRITE 3,(132,70),10, 3
670 RETURN
680 DATA0,0,0,42,81,81,99,BD,BD,5A,3C,18,18,18,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,18,3C,7E,7E,3C,18,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
690 DATAE7,A5,A5,BD,FF,FF,7F,3F,1F,F,0,0,0,0,0,0,38,28,28,EF,FF,FF,FF,FF,FF,FF,0
,0,0,0,0,0
700 DATA 1C,14,14,F7,FF,FF,FF,FF,FF,FF,0,0,0,0,0,0,E7,A5,A5,BD,FF,FF,FE,FC,F8,F0
,0,0,0,0,0,0
710 DATA1,19,3D,3D,1A,3C,58,98,98,18,1E,22,43,40,C0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0
720 DATA 80,98,BC,BC,58,3C,1A,19,19,18,78,44,C2,2,3,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0
```

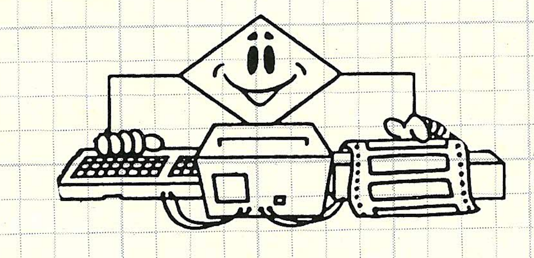


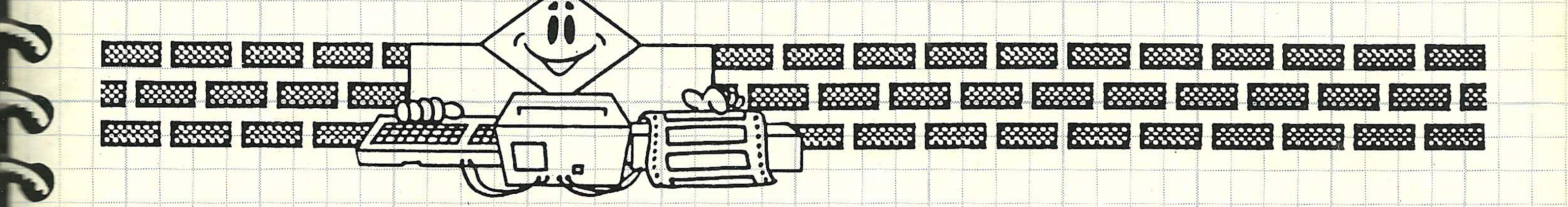


SALVAMENTO

```
10 ' O O O O O O O O O O O O O O O O O O O O
20 ' O N O O                    O O O O
30 ' O O O O SALVAMENTO  O O O O
40 ' O O O O                    O O O O
50 ' O O O O O O O O O O O O O O O O O O O O
60 '
70 ' LUIS SANGUINO ARIAS
80 '
90 :REMd          1986
100 ' O O O O O O O O O O O O O O O O O O O
110 '
120 COLOR 15,12,1:KEY OFF
130 SCREEN 3
140 OPEN"GRP:"AS1
150 PSET(10,80),12:PRINT#1,"SALVAME!"
160 FOR I=1 TO 1500
170 NEXT
180 CLOSE
190 COLOR 1,4,1
200 SCREEN 2, 2
210 OPEN"grp:"AS1
220 DEFINT X,Y,J,K
230 FOR K=1 TO 4 :B$="":FORI=1TO 32 :READ A$:B$=B$+CHR$(VAL("&H"+A$)):NEXT:SPRIT
E$ (K)=B$:NEXT
240 AA=1:BA=2:HU=0:HI=3
250 GOSUB 460
260 CIRCLE(227,90),15,15
270 CIRCLE(227,90),10,15
280 CIRCLE(227,90),7,15
290 LINE(0,93)-(255,0),5,BF
300 FOR ES=0 TO 255 STEP 2
310 YE=INT(RND(1)*95)
320 PSET(ES,YE),INT(RND(1)*14)+1
330 NEXT
340 CIRCLE(55,35),15,11
350 PAINT(50,35),11
360 CIRCLE(65,35),15,5
370 PAINT(65,35),5
380 TIME=0
390 ON STRIGGOSUB 430
400 STRIG(CT) ON
```

```
410 TI=TIME/50
420 GOTO 420
430 STRIG(CT) OFF
440 X=X+1
450 IF X>210 THEN 620
460 PUTSPRITE 1 ,(X,85), 1,AA
470 PUTSPRITE 2 ,(220,80+HU),1,3
480 IF RR=0 THEN RR=1 :RETURN
490 IF TI>35 THEN 520
500 SWAP AA,BA:SWAP HU,HI
510 GOTO 390
520 YH=85
530 CIRCLE(227,90),15,4
540 CIRCLE(227,90),10,4
550 CIRCLE(227,90),7,4
560 LINE(210,70)-(245,93),5,BF
570 PUTSPRITE 2 ,(220,209),1,3
580 YH=YH+1:IF YH>192 THEN MU=1:GOTO 620
590 PUTSPRITE 3 ,(220,YH),1,4
600 FOR I=1 TO25:NEXT
610 GOTO 580
620 COLOR 1,14
630 SCREEN 1
640 IF MU=1 THEN LOCATE 0,6:PRINT"           LO SIENTO              TU CHICA SE HA
 AHOGADO"
650 IF MU=0 THEN LOCATE 0,6:PRINT"        ERES UN HEROE..........ELLA TE AMARA
SIEMPRE"
660 LOCATE 2,10:PRINT"HAS TARDADO ";TI;"SEGUNDOS"
670 LOCATE 2,20:PRINT"OTRA PARTIDA SI O NO ¡S/N¿"
680 A$=INKEY$
690 I=I+1:IFI>13 THEN I=0
700 VDP(7)=I
710 IF A$="S" OR A$="s" THEN CLEAR:GOTO190
720 IF A$="n" OR A$="N" THEN END
730 GOTO 680
740 DATA0,0,0,0,0,3,E7,9F,8,F0,80,0,0,0,0,0,0,0,8,14,22,ED,FC,CC,20,10,10,10,20,
0,0,0,0,0,0,0,0,C3,27,1F,8,11,26,C0,80,0,0,0,0,0,0,0,C,EC,F8,CD,81,0,0,0,0,0,0
750 DATA 9,5,3,2,C4,25,12,9,7,3,3,3,1,0,0,0,20,40
760 DATA 80,80,46,48,90,20,C0,80,80,80,0,0,0,0,0,D,3,4,5,2,1,47,AB,11,1,3,7,8,5,
2,80,40,80,40,46,88,10 E0,C0,80,80,C0,E0,10,A,4
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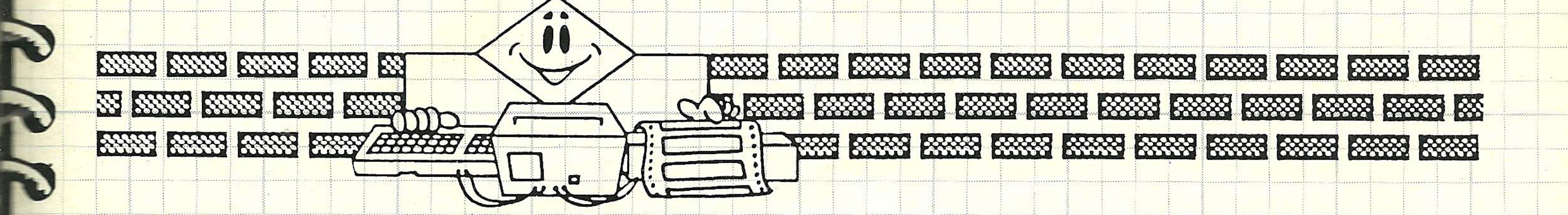




SUBMARINO

```
 10 ' O O O O O O O O O O O O O O O O O O O
 20 ' O O O O                 O O O O
 30 ' O O O O SUBMARINO  O O O O
 40 ' O O O O                 O O O O
 50 ' O O O O O O O O O O O O O O O O O O O
 60 '
 70 COLOR 3,6,10
 80 SCREEN 3
 90 OPEN"GRP:"AS#1
 100 PSET(45,80),6:PRINT#1,"SUBMA"
 110 FOR Y=1 TO 1500:NEXT
 120 COLOR15,5:SCREEN0,0:WIDTH40:KEYOFF:RESTORE500:FORZ=1TO22:READE$:PRINTE$:CHR$
(7):NEXT
130 IFINKEY$=""THEN130ELSESCREEN2:COLOR10
140 GOSUB540:LINE(0,0)-(255,10),13,BF:LINE(0,70)-(255,191),4,BF:NS=5:NT=10:TT=0:
NB=TT:TB=TT:YB=62:GOSUB470:GOSUB480:GOSUB490
150 X=127:Y=170:GOSUB270
160 L$=INKEY$
170 IFL$="F"ORL$="f"THEN580
180 IF(L$="Q"ORL$="q")ANDX>1THENX=X-1
190 IF(L$="W"ORL$="w")ANDX<247THENX=X+1
200 GOSUB270:GOSUB340
210 IFL$=CHR$(13)ANDTP=0THENTP=1:XT=X:YT=Y:NT=NT-1:GOSUB480:TT=TT+1
220 IFTP=0ANDNT=0THEN420
230 IFNS<1THEN410
240 IFTP=1THENGOSUB280
250 GOTO 160
260 GOTO260
270 PUTSPRITE2,(X,Y),14,2:PUTSPRITE3,(X,Y+8),14,3:RETURN
280 IFYT>70THENYT=YT-5ELSE300
290 PUTSPRITE4,(XT,YT),10,4:BEEP:RETURN
300 PUTSPRITE4,(XT,191),,4:TP=0:IFXT<=XBANDXT>XB-LB*8THENXE=XT:YE=YB:GOTO310ELSE
RETURN
```

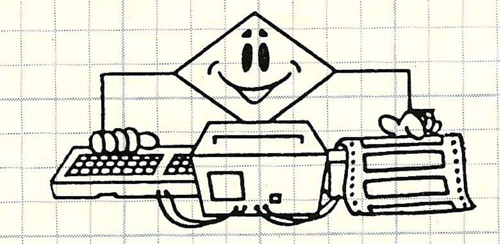
```
310 SOUND1,10:FORZ=255TO210STEP-1:PUTSPRITE0,(XE,YE),6,0:FORT=15TO1STEP-1:SOUND8
,T:NEXT:PUTSPRITE1,(XE,YE),9,1:FORT=1TO30:NEXT:PUTSPRITE1,(XE,191),,1:NEXT
320 PUTSPRITE0,(XE,191),,0:FORZ=6TO17:PUTSPRITEZ,(-8,191),,Z:NEXT:XB=-100:IFXE=X
TTHENNB=NB+1:GOSUB490:NT=NT+4-LB:GOSUB480ELSENS=NS-1
330 RETURN
340 IFXB+LB*8<8THENFORZ=6TO17:PUTSPRITEZ,(-8,191),,Z:NEXT:BB=INT(RND(-TIME)*6+1)
:XB=250:TB=TB+1:IFBB=1THENKB=6:LB=1ELSEIFBB=2THENKB=7:LB=1ELSEIFBB=3THENKB=8:LB=
2ELSEIFBB=4THENKB=10:LB=2ELSEIFBB=5THENKB=12:LB=3ELSEKB=15:LB=3
350 XB=XB-3:RB=0:FORZ=KB+LB-1TOKBSTEP-1:PUTSPRITEZ,(XB-RB,YB),1,Z:RB=RB+8:NEXT
360 IFX>XBANDX<XB+4THENCS=1:XC=XB:YC=70
370 IFCS=0THENRETURN
380 IFYC<186THENYC=YC+5ELSECS=0:PUTSPRITE5,(XC,191),7,5:RETURN
390 PLAY"T255L64C":PUTSPRITE5,(XC,YC),7,5:IFXC>=X-4ANDXC<=X+4ANDYC>=YANDYC<=Y+16
THENNS=NS-1:GOSUB470:XE=X:YE=YC:GOSUB310:CS=0:PUTSPRITE5,(XC,191),,5
400 RETURN
410 FORZ=20TO10STEP-1:PLAY"T255L64N=Z;":NEXT:COLOR15:DRAW"BM40,120":PRINT#1,"TU
FLOTA DE SUBMARINOS":DRAW"BM40,130":PRINT#1,"HA SIDO DESTRUDIDA":GOTO430
420 FORZ=20TO10STEP-1:PLAY"T255L64N=Z;":NEXT:COLOR15:DRAW"BM40,120":PRINT#1,"TE
QUEDASTE SIN TORPEDOS":DRAW"BM40,130":PRINT#1,"HAS SIDO DESTRUDIDO":GOTO430
430 FORT=1TO3000:NEXT:COLOR15:SCREEN0:LOCATE5,6:PRINT"PUNTUACION:":LOCATE2,8:PRI
NT"N. TOTAL DE TORPEDOS DISPARADOS:";TT:LOCATE2,10:PRINT"N. TOTAL DE BARCOS ENEM
IGOS:";TB:LOCATE2,12:PRINT"N. BARCOS ENEMIGOS HUNDIDOS:";NB
440 LOCATE1,14:PRINT"HAS HUNDIDO EL";INT(NB*100/TB);"% DE LA FLOTA ENEMIGA":LOCA
TE 7,20:PRINT"PARA OTRA PARTIDA PULSA P":LOCATE 7,22:PRINT"PARA OTRO PROGRAMA PU
LSA O"
450 L$=INKEY$:IFL$=""THEN450
460 IFL$="P"ORL$="p"THENRUNELSEIFL$="O"ORL$="o"THEN580ELSE460
470 LINE(86,0)-(112,10),13,BF:DRAW"BM0,2":PRINT#1,USING"SUBMARINOS:##";NS:RETURN
480 LINE(120,0)-(136,10),13,BF:PUTSPRITE20,(107,1),10,4:DRAW"BM120,2":PRINT#1,US
ING"##";NT:RETURN
490 LINE(230,0)-(255,10),13,BF:PUTSPRITE21,(140,0),10,8:PUTSPRITE22,(148,0),10,9
:DRAW"BM160,2":PRINT#1,USING"HUNDIDOS:###";NB:RETURN
500 DATA"       S   U   B   M   A   R   I   N   O",,
510 DATA"  Eres el Capit n de un submarino en","guerra, y por lo tanto tu misi"n
 es",hundir a los barcos enemigos..."  Te bastar  un torpedo para hundirlos",y c
uando lo consigas recibir s m s,torpedos. El enemigo te lanzar  unas
520 DATAterribles cargas de profundidad..."  El submarino se mueve a la izquierd
a","con Q y a la derecha con W, el torpedo",se dispara pulsando <ENTER>..."  El
juego termina al ser hundido cinco","veces, al acabarse los torpedos o al",pulsa
r la tecla F.
530 DATA,," PULSA UNA TECLA PARA COMENZAR EL JUEGO"
540 FORY=0TO17:T$="":FORX=0TO7:READE:T$=T$+CHR$(E):NEXT:SPRITE$(Y)=T$:NEXT:RETUR
N
550 DATA133,80,132,41,134,53,74,149,34,20,165,66,165,153,74,36,16,56,124,124,254
,254,238,198,198,198,238,254,124,124,56,40,16,56,56,56,56,16,56,40,0,0,0,60,36,6
0,60,60
560 DATA0,0,2,78,83,255,127,62,0,0,0,0,8,28,254,127,0,7,116,55,255,127,63,31,64,
192,39,246,255,255,254,252,0,0,73,73,255,127,63,31,32,60,34,62,255,255,254,252,0
,0,238,102,255,127,63,31,0,127,170,213,255,255,255,255,48,248,172,84,255,255,254
,252
570 DATA4,60,20,255,63,31,15,7,16,241,83,255,255,255,255,255,240,168,84,255,252,
252,248,240
580 CLEAR:SCREEN0:LOCATE4,12:PRINT"PARA EL SIGUIENTE PROGRAMA":LOCATE4,14:PRINT"
PULSA PLAY EN EL CASSETTE"
590 CLOAD
```

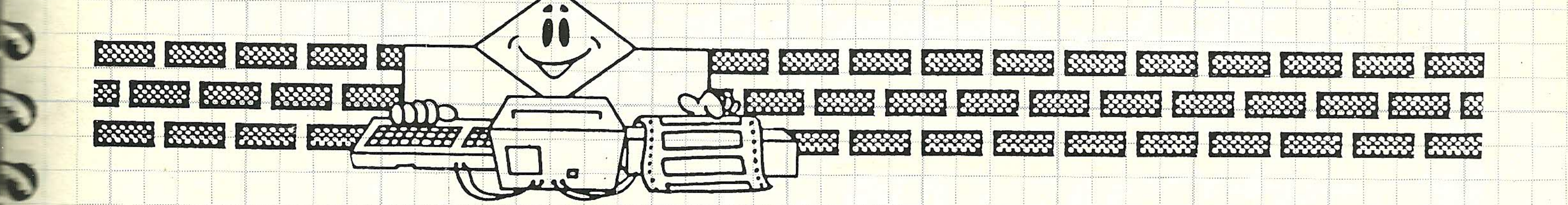


SALTO

```
10 ' O O O O O O O O O O O O O O O O O O O O
20 ' O O O O              O O O O
30 ' O O O O    SALTO     O O O O
40 ' O O O O              O O O O
50 ' O O O O O O O O O O O O O O O O O O O O
60 '
70 'LUIS SANGUINO ARIAS
80 '
90 '        1986
100 ' O O O O O O O O O O O O O O O O O O O O
110 '
120 CLEAR:COLOR 3,6,10
130 SCREEN 3
140 OPEN"GRP:"AS#1
150 PSET(55,80),6:PRINT#1,"SALTO"
160 FOR Y=1 TO 1500:NEXT
170 CLOSE
180 COLOR 1,2,13:SCREEN 2,2,1
190 DRAW"C15BM0,25F65R29F1D85R162U1BM0,19C7R2E8R14F28R5E24F5E6F11U8E7F39D9F9E39F
6U1E6R1D5U1E8D2F8U1E7F23D12U13"
200 PAINT (1,1),7
210 PAINT (1,191),15
220 B$="":FOR K=1 TO 3 :B$="":FORI=1TO 32 :READ A$:B$=B$+CHR$(VAL("&H"+A$)):NEXT
:SPRITE$ (K)=B$:NEXT
230 OPEN"GRP:"AS#1
240 G=.05
250 SOUND 6,15:SOUND 7,7:SOUND 8,16:SOUND 9,16:SOUND 10,16:SOUND 11,0 :SOUND 12,
16:SOUND 13,0
260 ON STRIG GOSUB 370
270 X=0:Y=3:A=2:B=3
280 Y=Y+1
290 STRIG(0) ON
300 X=X+1
310 PUTSPRITE 1 ,(X,Y), 1, 1
320 PUTSPRITE 2 ,(X,Y+16),1,A
330 IF X>95 THEN Y=(Y+(1/G))
340 IF Y>155 THEN 400
```

```
350 IF Y>60 THEN A=B:GOTO 300
360 GOTO 280
370 STRIG(0) OFF
380 G=G+.1
390 RETURN
400 J=J+1
410 A(J)=X
420 IF A(J)>JJ THEN JJ=A(J)
430 LINE (60,0)-(200,10),15,BF
440 PSET(66,3),15:PRINT₧1,"ULTIMO SALTO=";X
450 FOR I=1 TO 100:BEEP:NEXT
460 LINE (60,0)-(200,10),15,BF
470 PSET(70,3),7:PRINT₧1,"MEJOR SALTO=";JJ
480 FOR I=1 TO 1000:NEXT
490 IF J>4 THEN 510
500 GOTO 240
510 COLOR 1,15,6
520 SCREEN 1:KEY OFF
530 LOCATE 7,10:PRINT"TU MEJOR SALTO"
540 LOCATE 5,13:PRINT"HA SIDO=";JJ;"METROS"
550 LOCATE 1,20:PRINT"OTRA PARTIDA SI O NO ¡S/N¿"
560 X$=INKEY$
570 IF X$="S" OR X$="s"THEN RUN
580 IF X$="n" OR X$="N"THEN CLS:SCREEN 0:END
590 GOTO 560
600 DATA0,1,3,3,3,1,3,7,7,7,7,7,3,3,7,7,80,C0,C0,E0,C0,80,80,C0,C0,C0,E0,B0,98,c
,84,88,7,7,1,0,21,12,8,5,3,1,0,0,0,0,0,0,90,E0,E0,F0,30,60,C0,80,80,80,80,40,20,
10,C,0
610 DATA7,7,3,3,3,3,6,6,C,C,1C,1E,FF,0,0,0,88,88,8,8,8,8,8,8,1C,8,0,4,F8,0,0,0
```

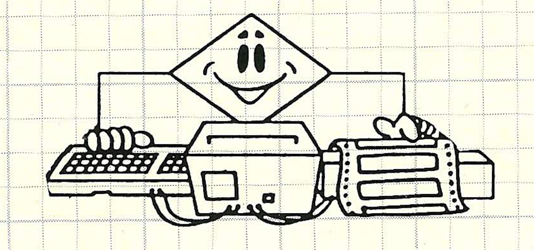




SUPERMOTO

```
10 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20 ' 0 0 0 0            0 0 0 0
30 ' 0 0 0 OSUPER MOTO  0 0 0 0
40 ' 0 0 0 0            0 0 0 0
50 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
60 '
70 'EUGENIO GARRIDO GOMEZ
80 '
90 '        1986
100 ' 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
110 '
120 COLOR 3,6,10
130 SCREEN 3
140 OPEN"GRP:"AS#1
150 PSET(45,80),6:PRINT#1,"SUPER"
160 FOR Y=1 TO 1500:NEXT
170 CLOSE
180 COLOR 1,14
190 SCREEN 1
200 LOCATE 3,10:PRINT"JOTSTICK O CURSOR(J/C)"
210 X$=INKEY$
220 I=I+1:IFI>13 THEN I=1
230 VDP(7)=I
240 IF X$="J"OR X$="j" THEN CT=1:GOTO270
250 IF X$="c"OR X$="C" THEN CT=0:GOTO270
260 GOTO 210
270 COLOR 15,4,1:SCREEN 2,2
280 GOSUB 520
290 YH=20:XH=34:GOSUB 510
300 PUTSPRITE 2,(YH,XH), 1, 1
310 PUTSPRITE 1,( YH, XH), 8, 2
320 YH=YH+V1
330 IF YH>255 THEN XH=84:YH=0
340 A=STICK(CT):IF A=1 THEN VE=VE+1:LINE (0,170)-(VE,176),6,BF:V1=VE/10
350 IF A=5 THEN VE=VE-3:LINE (VE,170)-(255,176),4,BF:V1=V/4
360 IF V1<=0 THEN VE=0:LINE (VE,170)-(255,176),4,BF
370 B=STRIG(CT)
```

```
380 IF B=-1 AND EN=0 THEN SA=1:EN=1
390 IF SA =1 THEN XH=XH-2
400 IF BA=1 AND XH<84 THEN XH=XH+3
410 IF SA=1 AND XH=<60 THEN BA=1:SA=0
420 IF XH=>84 THEN EN=0:SA=0:BA=0
430 IF POINT (YH+16,XH+16)=1 THEN GOTO 460
440 IF XH=>84 AND YH=>240 THEN OF=OF+1:RESTORE:VE=0:GOTO 280
450 GOTO 300
460 FOR N=1 TO 10:CIRCLE (YH+4,XH+4),N,6:NEXT N
470 FOR N=1TO20:YH=YH+5:XH=XH+SIN (N*10)
480 PUTSPRITE 1,( YH, XH), 8, 2:NEXT N
490 FOR I=1 TO13:FOR N=1 TO 8:A=INT(RND(1)*255):VPOKE 4352+N,A:VPOKE 12544+N,A:Y
H=YH+3:XH=XH+SIN (N/10)
500 NEXT I:RUN
510 PSET (82+11,100),15:DRAW "S4E10D10L10":PAINT (97,98),15:FOR O=1 TO OF:CIRCLE
 (100+(O*11),95),5,1:CIRCLE (100+(O*11),95),3,1:PAINT (100+(O*11),95),1:NEXT O:R
ETURN
520 FOR K=1 TO 4 :B$="":FORI=1TO 32 :READ A$:B$=B$+CHR$(VAL("&H"+A$)):NEXT:SPRIT
E$ (K)=B$:NEXT
530 LINE (0,50)-(255,60),10,BF
540 LINE (0,100)-(255,110),10,BF
550 PUTSPRITE 2,(20,34), 1, 1
560 PUTSPRITE 1,( 20, 34), 8, 2
570 PUTSPRITE 5,( 240, 84), 10, 4
580 FOR N=0 TO 255:VPOKE 6144+512+N,32:NEXT N
590 FOR N=1 TO 8:A=INT(RND(1)*255):VPOKE 4352+N,A:NEXT N
600 FOR N=0 TO 8:A=INT(RND(1)*255):VPOKE 8192+4352+N,A:NEXT N
610 RETURN
620 DATA0,0,0,0,0,0,0,0,61,9D,E,77,94,BF,90,60,0,0,0,0,0,20,10,D8,D0,BE,71,EC,5A
,92,12,C,0,1,1,1,3,6,6,6,3,1,1,1,0,0,0,0,0,80,80,0,0,C0,20,0,0,0,0,80,0,0,0,0,0,
0,1,F,F,19,19,19,19,18,1F,19,19,1F,C,C,0,0
630 DATA80,F0,F0,18,58,18,F8,58,F8,98,98,F8,30,30,0,0,0,FF,B5,DF,2D,D3,F7,DA,F1,
97,F7,D7,FB,FF,0,0,0,FF,28,BD,DF,AD,BB,2B,3C,6E,FC,BF,7D,FA
```



BIBLIOGRAFIA

Para Programadores MSX tu fiel compañero.



Esto no es un libro para el principiante novato, al contrario, introduce al programador MSX "dentro" del ordenador, para mostrarle exactamente como funciona y como obtener el máximo partido.

Los autores han dividido su libro en dos partes.

La primera parte cubre el diseño del sistema, como el vocabulario de BASIC se relaciona con los ordenadores MSX, y una introducción código máquina. Encontrará explicaciones detalladas sobre la organización de la memoria, los modos de pantalla y los circuitos de vide y sonido.

La segunda parte se dedica al uso del lenguaje ensamblador en el sistema MSX. Los principales apartados incluyen los puntos:

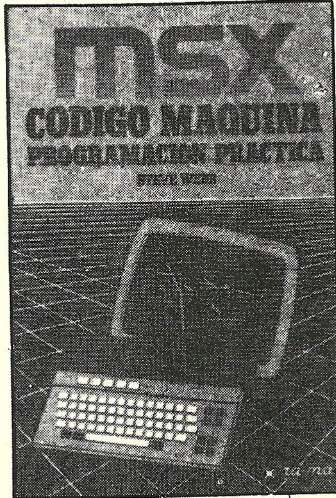
— El procesador de pantalla de vídeo.
— El circuito de sonido AY-3-8910.
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